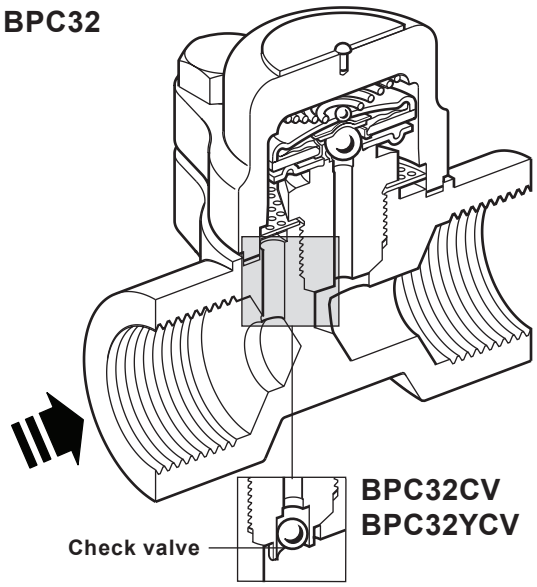
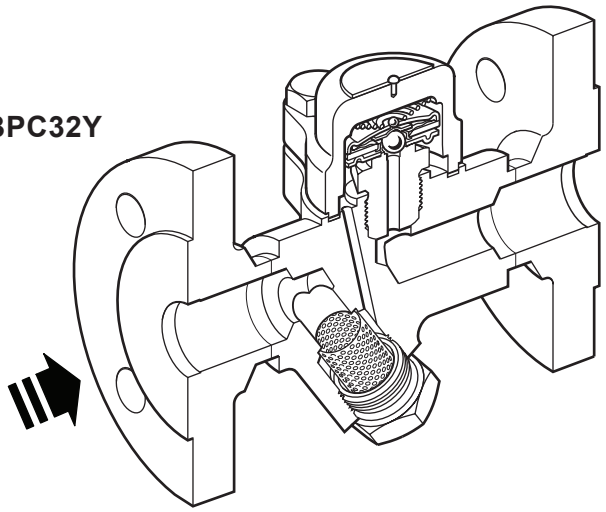
Local regulations may restrict the use of this product to below the conditions quoted.
In the interests of development and improvement of the product, we reserve the right to change the specification without notice. © Copyright 2025

BPC32 and BPC32Y Carbon Steel Balanced Pressure Thermostatic Steam Traps





Description

The BPC32 and BPC32Y are carbon steel maintainable balanced pressure thermostatic steam traps with straight connections.
The BPC32 has an integral flat strainer screen and the BPC32Y an integral cylindrical Y-type strainer. All pressure bearing components are produced by TÜV approved suppliers in accordance with AD-Merkblatt WO/TRD100. Both traps are unaffected by waterhammer and are available as follows:-

Standard units	**BPC32 and BPC32Y**	having 'STD' fill capsule	**Note:** When placing an order always state capsule fill.
Also available	**BPC32CV and BPC32YCV**	having 'STD' fill capsule and check valve	

Capsule fill and operation:

Standard capsule - Is marked with '**STD**' for operation at approximately 12 °C (53.6°F) below steam saturation temperature.

Optionally - The capsule can be supplied for sub-cooled '**SUB**' operation at approximately 24 °C (75.2 °F) below steam saturation temperature or near-to-steam '**NTS**' operation at approximately 6 °C (42.8 °F) below steam temperature.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

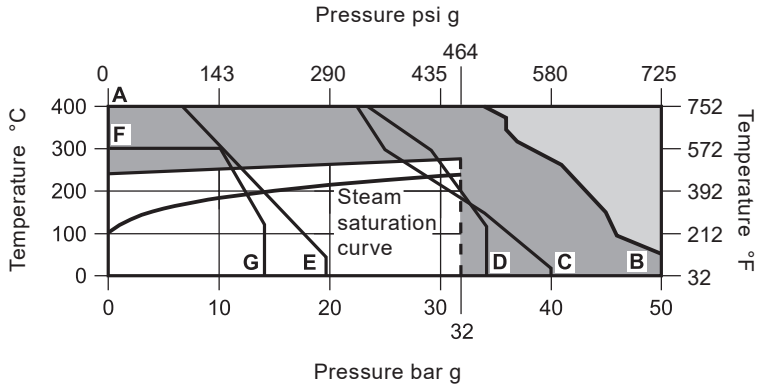
Certification

This product is available with certification to EN 10204 3.1.
Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

½", ¾", and 1" screwed BSP T Rp (ISO 7-1) or NPT.
½", ¾", and 1" socket weld ends to BS 3799.
½", ¾", and 1" butt weld ends to EN 12 627.
DN15, DN20 and DN25 standard flange to EN 1092 PN40,
ASME B 16.5 Class 150 and 300, JIS/KS 10K and JIS/KS 20K.

Pressure/temperature limits (ISO 6552)



The product **must not** be used in this region.

The product should not be used in this region or beyond its operating range as damage to the internals may occur.

A - B Screwed, socket weld, butt weld and flanged ANSI 300.

A - C Flanged EN 1092 PN40.

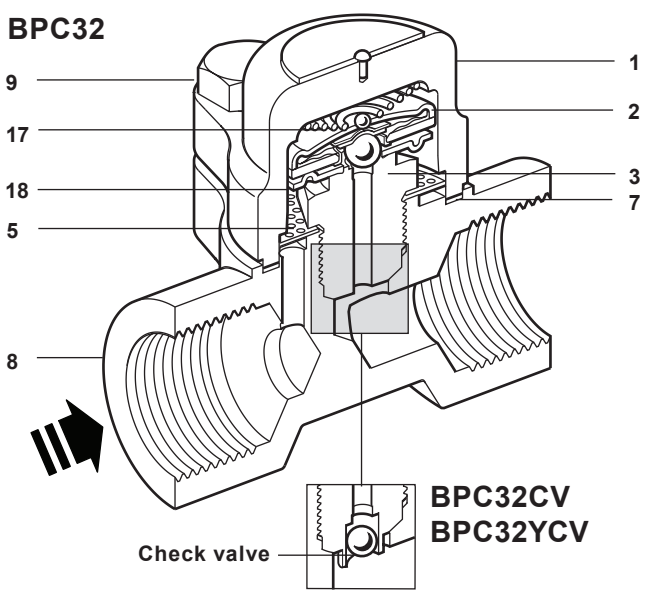
A - D Flanged JIS/KS 20K.

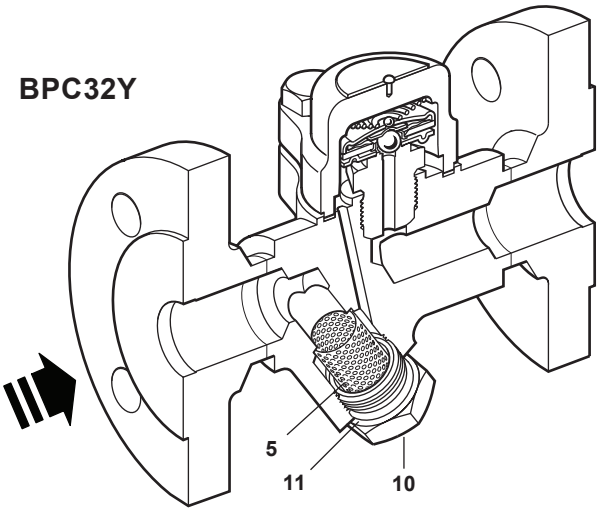
A - E Flanged ANSI 150.

F - G Flanged JIS/KS 10K.

Body design conditions			PN40
PMA	Maximum allowable pressure	50 bar g @ 50 °C	725 psi g @ 122 °F
TMA	Maximum allowable temperature	400 °C @ 35 bar g	752 °F @ 508 psi g
Minimum allowable temperature		-60 °C	-76 °F
PMO	Maximum operating pressure for saturated steam service	32 bar g @ 281 °C	464 psi g @ 537 °F
TMO	Maximum operating temperature	281 °C @ 32 bar g	537 °F @ 464 psi g
Minimum operating temperature **Note:** For lower operating temperatures consult Spirax Sarco.		0 °C	32 °F
BPC32 and BPC32Y product ranges are verified safe for use under full vacuum conditions for screwed, socket weld, butt weld and flanged connections. **Note**: Please consult Spirax Sarco to confirm full vacuum suitability, for other pipe connections.			
Designed for a maximum cold hydraulic test pressure of:		75 bar g	1088 psi g

Materials

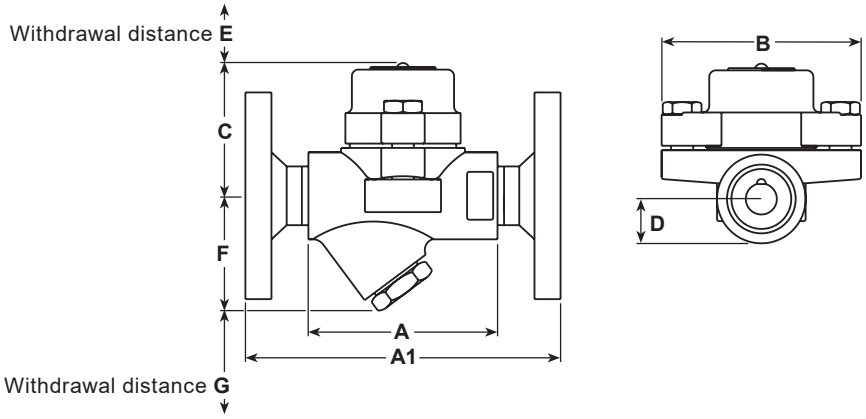




No.	Part	Material	
1	Cover	Carbon steel	DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
2	Capsule	Stainless steel	
3	Valve seat	Stainless steel	BS 970 431 S29
5	Strainer screen	Stainless steel	AISI 304
7	Cover gasket	Stainless steel reinforced exfoliated graphite	
8	Body / flanges	Carbon steel	DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
9	Cover bolts	Stainless steel (M10 x 30)	A2-70
10	Strainer cap	Carbon steel	DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
11	Strainer cap gasket	Stainless steel	BS 1449 304 S16
17	Spring	Stainless steel	
18	Spacer plate	Stainless steel	

Dimensions/weights

(approximate) in mm (inches) and kg (lbs)



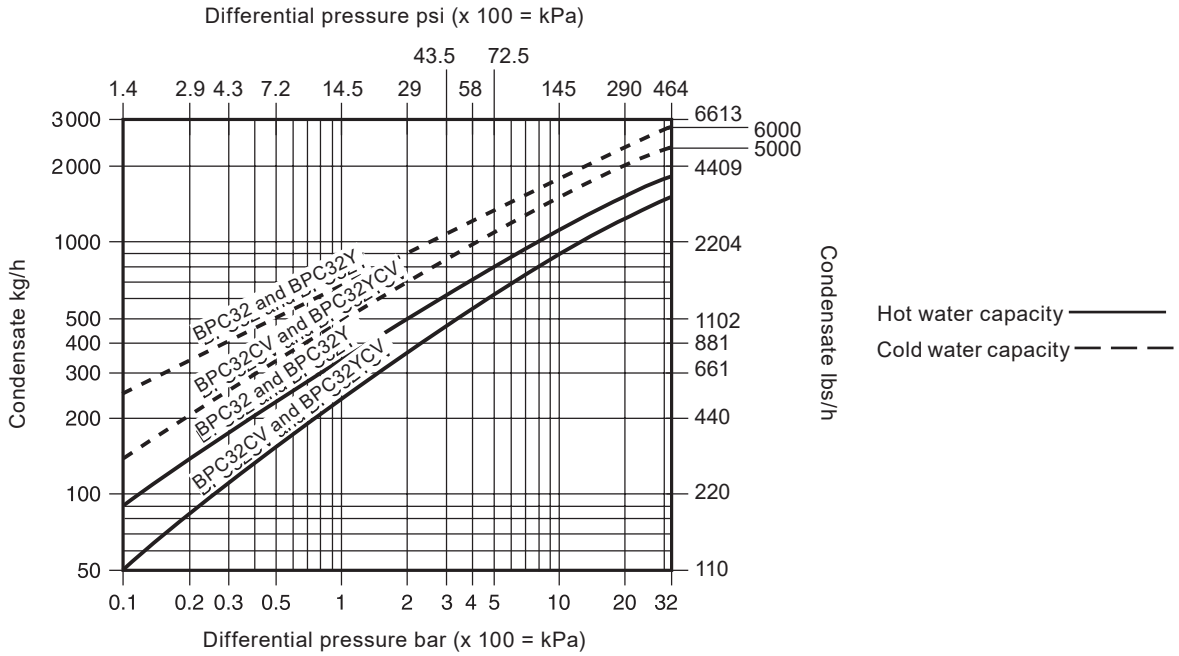
BPC32

Size	A	A1	B	C	D	E	F	G	Weight Scrd/SW/BW	Weight Flanged
½" DN15	95 (3.74)	150 (5.9)	94 (3.70)	64 (2.52)	17 0.67)	37 (1.46)	-	-	1.4 (3.1)	2.9 (6.4)
¾" DN20					19 (0.75)					3.5 (7.7)
1" DN25					23 (0.91)				1.5 (3.3)	4.1 (9.0)

BPC32Y

Size	A	A1	B	C	D	E	F	G	Weight Scrd/SW/BW	Weight Flanged
½" DN15	95 (3.74)	150 (5.9)	94 (3.70)	64 (2.52)	-	37 (1.46)	54 (2.13)	28 (1.10)	1.6 (3.5)	3.1 (6.8)
¾" DN20										3.7 (8.2)
1" DN25									1.8 (4.0)	4.4 (9.7)

Capacities



Safety information, installation and maintenance
For full details see the Installation and Maintenance Instructions (IM-P005-02) supplied with the product.

Installation note:
The BPC32 and BPC32Y are designed for installation in any position, horizontal or vertical.
It is recommended that a non-return valve is fitted when discharging condensate into return lines where backpressure is experienced.
It is also recommended that a diffuser is fitted when discharging to atmosphere.
For ease and maintenance, consideration should be given to fitting isolation valves upstream and downstream of the steam trap.

Disposal
These products are recyclable. No ecological hazard is anticipated with the disposal of these products, providing due care is taken.

How to order
Example: 1 off Spirax Sarco ½" BPC32 carbon steel bodied maintainable balanced pressure thermostatic steam trap. Screwed BSP with 'STD' fill capsule for operation at approximately 12 °C below steam saturation temperature.

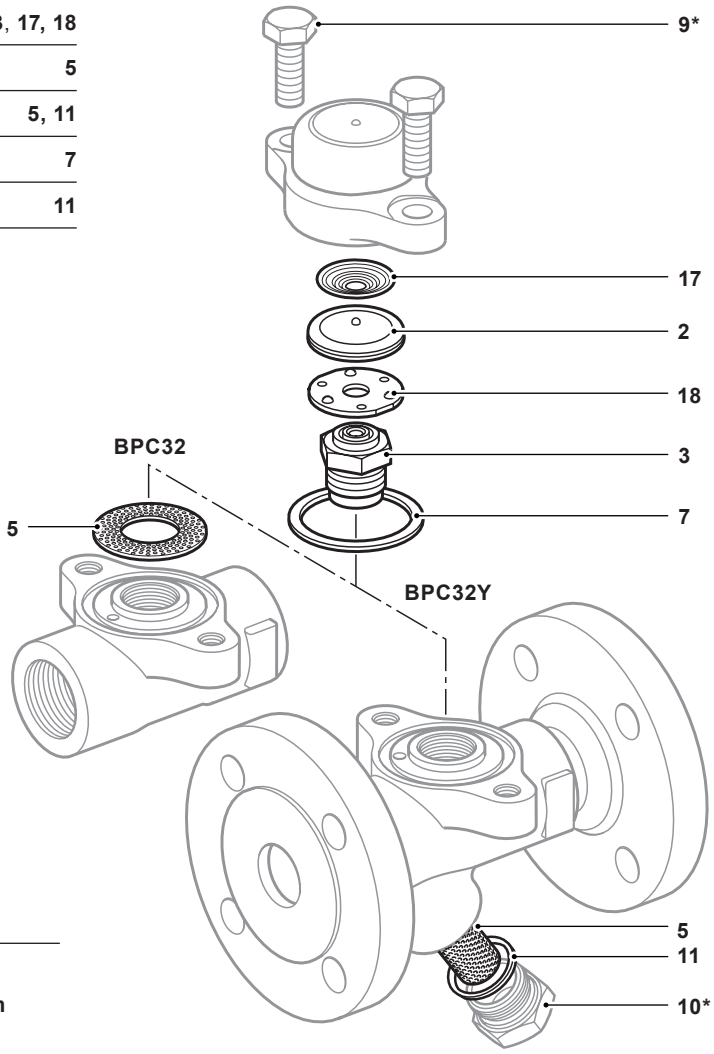
Spare parts
The spare parts available are shown in solid outline. Parts drawn in a grey line are not supplied as spares.

Available spares

Capsule and seat assembly set			**2**, **3**, **17, 18**
Strainer screen	BPC32	(3 off)	**5**
Strainer screen and gasket	BPC32Y	(1 off each)	**5, 11**
Set of cover gaskets		(packet of 3)	**7**
Strainer cap gasket		(packet of 3)	**11**

How to order spares
Always order spares by using the description given in the column headed 'Available spares' and state the size, model number and capsule reference.

Example: 1 - Capsule and seat assembly set for a Spirax Sarco DN25 BPC32 - 'STD' fill capsule for operation at 12 °C below steam saturation temperature.



*** Note:** Items 9 and 10 are not available as spares

Recommended tightening torques

Item	Part	or mm		N m
3	Valve seat	24 A/F		115 - 125
9	Cover bolts	16 A/F	M10 x 30	23 - 27
10	Strainer cap	27 A/F		120 - 135